

CLAIMS

What is claimed is:

1. A hinge assembly comprising:
a frame plate for engagement to a furniture frame member comprising means for engaging a spring assembly;
an intermediate plate comprising means for rotatably engaging the intermediate plate with a pin, and two side members;
a spring assembly for releasably engaging the intermediate plate to the frame plate; and,
a base plate comprising two side members each having at least one aperture therein, and a pin;
wherein the pin extends through the apertures on the side members of the base plate and the means for rotatably engaging the intermediate plate with a pin provide a slideable engagement between the base plate and the intermediate plate; and
wherein the spring assembly provides a releasable engagement between the frame plate and the intermediate plate.
2. The hinge assembly of claim 1, wherein the means for rotatably engaging the intermediate plate with a pin comprises at least one aperture on each of the side members of the intermediate plate through which the pin extends.

3. The hinge assembly of claim 1, wherein the means for rotatably engaging the intermediate plate with a pin comprises two hooks extending from the intermediate plate and wrapping at least partially around the pin.
4. The hinge assembly of claim 1 wherein the spring assembly comprises a push button spring assembly.
5. The hinge assembly of claim 4 wherein the frame plate further comprises two front catch members, and two rear hook portions, the intermediate plate further comprises two front apertures on the side members, and wherein the push button spring assembly comprises a push button facing the rear of the hinge assembly having two step members tensioned against the hook portions by two springs compressed between the pin and the push button, such that the intermediate plate is separably engageable to the frame plate through the interaction between the front catch members of the frame plate and the front apertures of the intermediate plate side members and the rear hook portions and the step members.
6. The hinge assembly of claim 1 wherein the spring assembly comprises a leaf spring.
7. The hinge assembly of claim 6, wherein the frame plate further comprises a plurality of hook members and means for engaging a leaf spring, the intermediate plate further comprises a plurality of hook engagement members and a spring

engagement tab, such that the intermediate plate is separably engageable to the frame plate by sliding the hook engagement members into the hooks of the frame plate and securing the leaf spring to the tab on the intermediate member.

8. The hinge assembly of claim 1 wherein the base plate further comprises two adjustment screws for adjusting the position of a furniture door engaged to the hinge assembly.

9. A hinge assembly comprising:

a frame plate comprising means for securing said frame plate to a furniture frame member, at least one rear hook member extending from the body of said frame plate, and at least one front catch member;

an intermediate plate comprising a body portion having comprising means for engaging the front catch member of the frame plate, and a push button assembly comprising, at least one spring, and at least one step on the push button for engaging the rear hook member of the frame plate, said at least one spring being positioned to supply tension to the push button such that the step engages the at least one rear hook member of the frame plate; and,

a base plate comprising means for securing the base plate to the intermediate plate.

10. The hinge assembly of claim 9, further comprising a depth adjustment screw for adjusting the depth of the door relative to the furniture frame member.

11. The hinge assembly of claim 9, further comprising a horizontal adjustment screw for adjusting the position of the door horizontally relative to the furniture frame member.

12. The hinge assembly of claim 9, wherein the frame plate comprises two rear hook members and two front catch members, the intermediate plate comprises two side members which extend from opposite sides of the intermediate plate and comprise rear apertures for receiving the pin and front apertures for engaging each of the front catch members of the frame plate.

13. The hinge assembly of claim 12, wherein the push button assembly comprises two springs and two steps on the push button for engaging the rear hook members of the frame plate.

14. The hinge assembly of claim 13, wherein the intermediate plate and the base plate are releaseable from the frame plate by pressing the push button against the force of the springs until the steps on the push button disengage from the hook members on the frame plate thereby allowing the intermediate plate to be separated from the frame plate.

15. The hinge assembly of claim 9, wherein the push button comprises means for receiving the pin and securing the springs against said pin under tension, such that the springs provide force to extend the push button toward the rear of the hinge.

16. The hinge assembly of claim 9 wherein the base plate substantially covers the intermediate plate and the frame plate when the hinge assembly is assembled and installed in a furniture article.

17. A hinge assembly comprising:

a frame plate comprising means for securing the frame plate to the furniture frame, a plurality of hook members extending from opposite sides of the frame plate, and a retention spring securely attached to a front end of the frame plate and extending towards the back end of the frame plate between the plurality of hook members;

an intermediate plate comprising a plurality of protrusions which engage the plurality of hook members on the frame plate, and means for releasably engaging the intermediate plate to the retention spring; and,

a base plate comprising a body portion and a leg portion extending substantially perpendicular from the front end of said body portion, and means for adjustably connecting the base plate to the intermediate plate.

18. The hinge assembly of claim 17 wherein the plurality of hook members on the frame plate further comprises four hook members.

19. The hinge assembly of claim 17, wherein the retention spring comprises a leaf spring.

20. The hinge assembly of claim 17, wherein the means for releasably engaging the retention spring comprises an inward facing tab extending from a back end of the intermediate plate and through an aperture in the retention spring.

21. The hinge assembly of claim 17, wherein the intermediate plate and base plate are released from the frame plate by pressing a finger tab on the retention spring to move the rearward portion of the retention spring away from the tab, thereby releasing the tension in the spring and allowing the base plate and intermediate plate to be removed from the frame plate.

22. The hinge assembly of claim 17 wherein the base plate substantially covers the intermediate plate and frame plate when the hinge assembly is assembled and installed in a furniture article.